

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A flexibility suite for routing optical fibres within a telecommunications switch installation, the suite comprising:

a first flexibility point and a second flexibility point, the first flexibility point including a first set of conduits, each of the conduits having a first end disposed in a first array and a second end disposed in a second array;

the second flexibility point including a second set of conduits, each of the conduits having a first end disposed in a third array and a second end disposed in a fourth array;

the flexibility suite being so arranged as to permit the conduit ends on the second array to be interconnected with conduit ends on the third array by means of tubular interconnects ~~so that, by selecting the to form a continuous conduit path between selectively interconnected~~ conduits whose ends on the second and third arrays are interconnected, ~~a continuous path can be formed between any selected conduit end in the first array and any selected conduit end in the fourth array.~~

2. (Currently Amended) A flexibility suite as claimed in claim 1 wherein said tubular interconnects are present and interconnect conduit ends on the second and third arrays, and wherein means are provided to control the paths taken by the tubular interconnects.

3. (Currently Amended) A flexibility suite as claimed in claim 1, wherein each of the conduit ends on the second, third and fourth arrays is provided with a connector for connection of the respective conduit end to a tubular interconnect.

4. (Currently Amended) A flexibility suite as-claimed in claim 3, wherein each connector of the third array is provided by one end of a double-ended connector, the other end of each connector providing the corresponding connector of the fourth array, the bores of the connectors providing the conduits of the second set.

5. (Currently Amended) A flexibility suite as-claimed in claim 3, wherein each of the conduit ends of the first array are also provided with a connector for connection of the respective conduit end to a tubular interconnect.

6. (Currently Amended) A flexibility suite as-claimed in claim 5 wherein each connector of the second array is provided by one end of a double-ended connector, the other end of the connector providing ~~the~~ a corresponding connector of the first array, the bores of the connectors providing the conduits of the first set.

7. (Currently Amended) A flexibility suite as-claimed in claim 1, wherein the bores of the conduits and the tubular interconnects are between 1.5 and 5-millimetres millimeters in diameter.

8. (Currently Amended) A flexibility suite as-claimed in claim 7, wherein the bores are between 2 and 4-millimetres millimeters in diameter.

9. (Currently Amended) A flexibility suite as-claimed in claim 1, wherein the second and third arrays or the first and fourth arrays are arranged side-by-side to be located side-by-side.

10. (Currently Amended) A flexibility suite as-claimed in claim 9, wherein the side-by-side arrays are provided on two panels distinct from each other.

11. (Currently Amended) A telecommunications switch or router installation comprising;

a telecommunications switch or router;

a first and at least one second flexibility suite according to claim 1;

a sub-path being defined through each of the flexibility suites from the first array to the fourth array via an interconnection between the second and third arrays;

the fourth array of the first flexibility suite being interconnected with the first array of the or one of the second flexibility suite (s);

a continuous tubular pathway being provided between the fourth array of the second flexibility suite or the last of the second flexibility suites and the switch or router;

the other second flexibility suites, if any, being interconnected in series with the first array of each of subsequent second flexibility suite being interconnected with the fourth array of the preceding second flexibility suite by means of a tubular interconnect, so that a substantially continuous path is provided for installation of a blown-fibre member between the first flexibility suite and the switch or router;

wherein the switch or router is optically connected, via an optical fibre of a continuous blown-fibre member which extends along said substantially continuous path, to an optical fibre of an optical fibre cable which enters the installation from an external telecommunications network.

12. (Currently Amended) An installation as claimed in claim 11, wherein the optical fibre of the blown- fibre member is spliced to the fibre of the incoming cable.

13. (Currently Amended) An installation as claimed in claim 11, wherein the optical fibre of the blown- fibre member is spliced to a fibre of a cable or fibre unit which is within the optical path between the incoming cable and the blown-fibre member.

14. (Previously Presented) An installation according to claim 11, including a plurality of secondary flexibility suites.

15. (Currently Amended) An installation according to claim 11, wherein a plurality of telecommunications switches are connected, via the primary and secondary flexibility suites, to optical fibres of several incoming cables.

16. (Previously Presented) An installation according to claim 11, including bend control means to control the bend radius of the blown fibre tube.

17. (Currently Amended) A method of creating a connection in a telecommunications switch or router installation, between a telecommunications switch or router, and an optical fibre of an incoming cable connected to and incoming from a telecommunications network, said method comprising the steps of:

installing lengths of blown fibre tube and joining the ends of the lengths of blown fibre tube to form a continuous tubular path from a primary flexibility suite to the telecommunications switch via a secondary flexibility suite, where the primary and secondary flexibility suites include means for routing joined blown fibre tubes within the installation, and thereafter, installing, by blowing, a continuous blown fibre unit through the path formed by the joined blown fibre tubes, to provide an optical path between the telecommunications switch and the optical fibre of the incoming cable.

18. (Currently Amended) A method of re-routing an existing connection in a telecommunications switch or router installation from a connection between a first telecommunications switch or router and a primary flexibility suite, to create a connection between a second telecommunications switch or router and the primary flexibility suite, said method comprising the steps of:

breaking ~~thea~~ connection between ~~thea~~ first telecommunications switch and ~~thea~~ primary flexibility suite,

joining ~~the~~ ends of lengths of blown fibre tube to form a continuous tubular path from the primary flexibility suite to ~~thea~~ secondary telecommunications switch via a secondary flexibility suite, where ~~the primary and secondary flexibility suites include means for routing joined blown fibre tubes are routed and joined~~ within the ~~installation~~ primary and secondary flexibility suites, and thereafter, installing, by blowing, a continuous blown fibre unit through the path formed by the joined blown fibre tubes thereby providing an optical path between the second telecommunications switch or router and the optical fibre of the incoming cable.

19. (Currently Amended) A method according to claim 17, wherein:

the primary flexibility suite includes a line-side optical flexibility point and an equipment-side blown fibre tube flexibility point located in proximity to each other, and the secondary flexibility suite includes a line-side blown fibre flexibility point and an equipment-side blown fibre flexibility point located in proximity to each other, ~~wherein the~~

a continuous tubular path from the primary flexibility suite to the telecommunications switch is formed by installing a blown fibre tube from the equipment-side blown fibre flexibility point in the primary flexibility suite to the line-side blown fibre flexibility point in the secondary flexibility suite,

installing a blown fibre tube from the equipment-side blown fibre flexibility point in the secondary flexibility suite to the telecommunications switch, and

interconnecting the line-side flexibility point to the equipment-side flexibility point ~~in flexibility suite.~~

20. (Previously Presented) A method according to claim 17, wherein the continuous blown fibre unit is installed by blowing from an equipment rack housing the telecommunications switch.

21. (Previously Presented) A method according to claim 17 wherein the continuous blown fibre unit is pre-connectorised.

22. (Previously Presented) A method according to claim 17 wherein the continuous blown fibre unit is installed by blowing from the line-side optical flexibility point of the primary flexibility suite.

23. (New) A flexibility suite for routing an optical fibre within a telecommunications switch installation, the suite comprising:

a first patch panel comprising a first row of conduits,

a second path panel comprising a second row of conduits,

optical fibre bend control means having an axis along which the bend control means co-extends with the first and the second rows of conduits,

wherein a continuous tubular path controlled by the bend control means is formed between the first patch panel and the second patch panel by using a patch tube to connect any conduit of the first patch panel to any conduit of the second patch panel.

24. (New) A flexibility suite as in claim 23 wherein at least one of the first patch panel or the second patch panel comprises more than one row of conduits.

25. (New) A flexibility suite as in claim 23 wherein at least one of the conduits is provided with a connector for connection by the patch tube.
26. (New) A flexibility suite as in claim 23 wherein the bend control means is sited between the first patch panel and the second patch panel.
27. (New) A flexibility suite as in claim 23 comprising:
 - a first flexibility point including a first patch panel and bend control means having a first curved face, and
 - a second-flexibility point including a second patch panel and bend control means having a second curved face.
28. (New) A flexibility suite as in claim 27 wherein the first flexibility point is non-unitary with the second flexibility point.
29. (New) A flexibility suite as in claim 27 comprising more than two flexibility points.
30. (New) A flexibility suite as in claim 23 wherein:
 - at least one conduit of the first row comprises a first conduit end and a second conduit end, and
 - at least one conduit of the second row comprises a third conduit end and a fourth conduit end,

the tubular path being formed by connecting a first end of the patch tube to the second conduit end and connecting a second end of the patch tube to the third conduit end.

31. (New) A flexibility suite as in claim 30 wherein:
a first optical fibre tube is connected to the first conduit end, and
a second optical fibre tube is connected to the fourth conduit end,
the tubular path being formed to extend beyond conduits of the first or the second patch panel.

32. (New) A flexibility suite as in claim 31 further including bend management means to manage the bend radius of at least one of the first or the second optical fibre tubes.

33. (New) A flexibility suite for routing an optical fibre within a telecommunications switch installation, the suite comprising:
a flexibility point including a row of conduits and optical fibre bend control means having an axis along which the bend control means co-extends with the row of conduits, and
splicing means,

wherein a continuous tubular path is controlled by the bend control means formed between the patch panel and the splicing means by using a patch tube to connect a selected conduit of the patch panel to the splicing means.

34. (New) A flexibility suite installation comprising a plurality of flexibility suites according to claim 23.

35. (New) A telecommunications switch or router installation comprising:
a telecommunications switch or router,
a first flexibility suite according to claim 23, and
a second flexibility suite according to claim 23,
wherein a continuous tubular path is formed from the first flexibility suite to the second flexibility suite,

the tubular path being formed by:

- (a) a patch tube connecting a conduit of the first patch panel to a conduit of the second path panel within the first flexibility suite,
- (b) a patch tube connecting a conduit of the first patch panel to a conduit of the second patch panel within the second flexibility suite, and
- (c) at least one optical fibre tube connecting conduits between the first and the second flexibility suite,

wherein an optical fibre can be installed along the tubular path so formed.

36. (New) An installation according to claim 35 further including at least one subsequent flexibility suite according to claim 23, wherein:

the first flexibility suite is connected to a subsequent flexibility suite in series via the second flexibility suite using optical fibre tubes, so that the tubular path is formed from the first flexibility suite to a subsequent last flexibility suite in the series.

37. (New) A telecommunications switch or router installation comprising:

a telecommunications switch or router,

an external optical fibre of a telecommunications network,

a primary flexibility suite according to claim 23, and

at least one secondary flexibility suite according to claim 23,

wherein a tubular path is formed from the primary flexibility suite to the telecommunications switch or router via each secondary flexibility suite in series, the tubular path being formed by:

- (a) a patch tube connecting a conduit of the first patch panel to either a conduit of the second patch panel or to the splicing means within the primary flexibility suite,
- (b) a patch tube connecting a conduit of the first patch panel to a conduit of the second patch panel within each secondary flexibility suite, and
- (c) at least one optical fibre tube connecting conduits between flexibility suites, wherein an optical fibre can be installed along the tubular path so formed to optically connect the switch or router to the external optical fibre.

38. (New) An installation as in claim 37 wherein a plurality of telecommunications switches or routers are connected, via the primary and secondary flexibility suite, to several external optical fibres.

39. (New) An installation according to claim 35 wherein the flexibility suites are disposed on different floors of a building housing the installation.

40. (New) A flexibility patch panel suitable for use with a second patch panel, the patch panel comprising

a row of conduits,
optical fibre bend control means having an axis along which the bend control means co-extends with the row of conduits,

wherein a continuous tubular path controlled in bend radius by the bend control means is formed between the patch panel and a second patch panel by using a patch tube to connect a conduit of the first patch panel to a conduit of the second patch panel.

41. (New) A method of creating a connection in a telecommunications switch or router installation, between a telecommunications switch or router, and an external optical fibre of a telecommunications network said method comprising:

installing lengths of patch tube and optical fibre tube and

joining ends of the lengths of patch tube and optical fibre tube to form a continuous tubular path from a primary flexibility suite to the switch or router via a secondary flexibility suite and

installing a continuous optical fibre through the tubular path to optically connect the switch or router and the optical fibre of the external cable.

42. (New) A method of re-routing an existing connection in a telecommunications switch or router installation, from a connection between a first telecommunications switch or router and an external optical fibre of a telecommunications network via a primary flexibility suite to create a connection between a second telecommunications switch or router and the external optical fibre via the primary flexibility suite, said method comprising:

breaking connections between the first switch or router and the primary flexibility suite

joining ends of lengths of patch tube and optical fibre tube to form a continuous tubular path from the primary flexibility suite to the second switch or router via a secondary flexibility suite, and

installing a continuous optical fibre through the tubular path formed by the joined patch tubes and optical fibre tubes thereby providing an optical path between the second switch or router and the external optical fibre.

43. (New) A method as in claim 41 wherein the continuous optical fibre is pre-connectorized.

44. (New) A method as in claim 41 wherein the continuous optical fibre is installed from an equipment rack housing the switch or router to the primary flexibility suite.

45. (New) A method as in claim 41 wherein the continuous optical fibre is installed form the primary flexibility suite to the switch or router.